*Thermochimica Acta*, 219 (1993) 381
Elsevier Science Publishers B.V., Amsterdam



# AUTHOR INDEX

Acree, W.E., Jr. 97
Allan, J.R. 159
Argentero, M. 315

Barja, I. 135
Barros, N. 135
Beaumont, P.C. 159
Becker, V. 305
Benito, I. 179
Bhowmick, A.K. 293
Blanco, C. 179
Borah, M. 191
Buhl, J.-Ch. 205

Cammenga, H.K. 333
Castanet, R. 365
Chaki, T.K. 283
Chen, Y. 115
Contreras, M.D. 167
Cotton, M.L. 245
Coulet, A. 365

Demirel, Y. 83
Deng, Y. 43
de Oliveira, L.C.S. 215
Dorofeeva, O.V. 361
Dunstan, P.O. 173
Dutta, N.N. 191

El-Askalany, A.H. 65
Eysel, W. 333

Farajollahi, M.M. 151

Galkova, T.N. 235
Garcia-Alvarez-Coque, M.C. 53
Giolito, I. 225
Girela, F. 167
Gmelin, E. 333
Gomaa, E.A. 65
Gomez-Orellana, I. 135
González, F. 179
Gu, Z. 115

Hafez, M.A. 121
Hemminger, W. 333
Höhne, G.W.H. 333
Housaindokht, M.R. 143

Ionashiro, M. 215, 225

Jaroszyk, F. 355

Kemp, R.B. 17
Khastgir, D. 293
Koner, S. 261

Latkar, A.A. 269
Lin, H. 115
Liu, J.-S. 43

Martin-Biosca, Y. 53
Matos, J.R. 173
Melios, C.B. 215
Mendioroz, S. 179
Michel, M.-L. 365
Milburn, G.H.W. 159
Moghaddasi, J. 143
Moosavi-Movahedi, A.A. 143, 151
Morales, J.J. 343
Moscardini D'Assunção, L. 225
Moussa, M.N.H. 121
Mukunda, P.G. 283

Nando, G.B. 283
Nikumbh, A.K. 269
Núñez Regueira, L. 135

Pacewska, B. 235
Parera, A. 167
Pariya, C. 261
Peper, K. 305
Peslyak, G.V. 235
Pesquera, C. 179
Phadke, M.M. 269
Poeßnecker, W. 325
Prodan, E.A. 235
Pysiak, J. 235

Ramis-Ramos, G. 53
Rosera, D.E. 225
Ray Chaudhuri, N. 261
Razeghifard, M.R. 151
Ribeiro, C.A. 215

Said, H. 365
Saikia, C.N. 191
Santra, R.N. 283
Sarge, S.M. 333
Sayed, M.B. 73
Sen, A.K. 293
Shehatta, I.S. 65, 121
Simo-Alfonso, E. 53
Sotnikova-Yuzhik, V.A. 235
Spirandeli Crespi, M. 215
Stradella, L. 315

Taniewska-Osińska, S. 105
Thavamani, P. 293
Tian, A.-M. 43
Tkacyzk, M. 105
Tolmach, P.I. 361
Tuliszka, M. 355

Van Oort, M.J.M. 245
Vicentini, G. 173

Wadsö, I. 1
Wood, I. 159

Zahmatkesh, M. 151
Zeman, A. 305
Zeng, X.-C. 43
Zinner, K. 173
Zinner, L.B. 173

*Thermochimica Acta*, 219 (1993) 383–389
Elsevier Science Publishers B.V., Amsterdam



# SUBJECT INDEX

Accuracy
On the accuracy of results from microcalorimetric measurements on cellular systems 1
On the estimation of gas-phase thermodynamic properties of organic compounds 361
Additivity
On the estimation of gas-phase thermodynamic properties of organic compounds 361
Aero engine
Deposit formation in aero engines — investigation by pressure differential scanning calorimetry (PDSC) 305
Alloy
Thermodynamic investigation of the Rh–Ge and Ir–Ge binary alloys 365
Atmosphere
Thermal decomposition of the hydrated basic carbonates of lanthanides and yttrium in $CO_2$ atmosphere 225
Studies on the formation of $\gamma$-$Fe_2O_3$ by thermal decomposition of ferrous malate dihydrate 269

Basic carbonate
Thermal decomposition of the hydrated basic carbonates of lanthanides and yttrium in $CO_2$ atmosphere 225
Binary system
Correlation of heats of mixing of liquid mixtures by the NRTL model 83
Bioenergetics
Developments in cellular microcalorimetry with particular emphasis on the valuable role of the energy (enthalpy) balance method 17
Biological calorimetry
Developments in cellular microcalorimetry with particular emphasis on the valuable role of the energy (enthalpy) balance method 17
Biuret
A study of the thermal decomposition of urea, of related compounds and thiourea using DSC and TG–EGA 315
Blend
Thermogravimetric studies on miscible blends of ethylene–methyl acrylate copolymer (EMA) and polydimethylsiloxane rubber (PDMS) 283
Brönsted acid
The effect of pre-heating on the evolution of the acidity of pillared clays 179

Cadmium compound
A calorimetric study of the protonation of vitamin $D_3$ and of three other ligands and their formation of binary and ternary complexes with Cd(II) 115
Calibration
The temperature calibration of scanning calorimeters. Part 2. Calibration substances 333
Calorimetry
On the accuracy of results from microcalorimetric measurements on cellular systems 1
The enthalpy of solution of sodium, potassium and caesium chlorides in propionic acid–water mixtures at 298.15 K 105
The temperature calibration of scanning calorimeters. Part 2. Calibration substances 333
Carbonate
The properties of salt-filled sodalites. Part 3. Synthesis and thermal behaviour of basic and non-basic carbonate enclathrated sodalites 205
Thermal decomposition of the hydrated basic carbonates of lanthanides and yttrium in $CO_2$ atmosphere 225
Cellulose
Thermal behaviour of some homogeneously esterified products of high $\alpha$-cellulose pulps of fast growing plant species 191
Clathrate
The properties of salt-filled sodalites. Part 3. Synthesis and thermal behaviour of basic and non-basic carbonate enclathrated sodalites 205
Clay
The effect of pre-heating on the evolution of the acidity of pillared clays 179

Cobalt compound
Structural and thermal studies of the chloro complexes of cobalt, nickel and copper with 1,6-hexanediamine 159
Conductivity
Thermal conductivity measurements of tRNA melting process 355
Copolymer
Thermogravimetric studies on miscible blends of ethylene–methyl acrylate copolymer (EMA) and polydimethylsiloxane rubber (PDMS) 283
Copper compound
Structural and thermal studies of the chloro complexes of cobalt, nickel and copper with 1,6-hexanediamine 159
Co-solvent
The enthalpy of solution of sodium, potassium and caesium chlorides in propionic acid–water mixtures at 298.15 K 105
Cross link
The effect of crosslink density, curing system, filler and resin on the decomposition of hydrogenated nitrile rubber and its blends 293
Curing
The effect of crosslink density, curing system, filler and resin on the decomposition of hydrogenated nitrile rubber and its blends 293
Cyanuric acid
A study of the thermal decomposition of urea, of related compounds and thiourea using DSC and TG–EGA 315

Decomposition
Preparation and thermal decomposition of solid state compounds of 4-methoxybenzylidenepyruvate and trivalent lanthanides and yttrium 215
Thermally induced isomerization and decomposition of *N*-(2-aminoethyl)-1,3-propanediamine complexes of nickel(II) in the solid state 261
Studies on the formation of $\gamma$-$Fe_2O_3$ by thermal decomposition of ferrous malate dihydrate 269
The effect of crosslink density, curing system, filler and resin on the decomposition of hydrogenated nitrile rubber and its blends 293
Dehydration
Studies on the formation of $\gamma$-$Fe_2O_3$ by thermal decomposition of ferrous malate dihydrate 269
Denaturation
The thermal denaturation of histones ($H_2A$, $H_3$, $H_2B$) in the presence of surfacants 151
Deposit
Deposit formation in aero engines — investigation by pressure differential scanning calorimetry (PDSC) 305
Detergent
Thermodynamic studies of the interaction of glucose oxidase with anionic and cationic surfactants 143
DMSO
Thermodynamic parameters of transfer and solution of oxalic acid in dimethylsulphoxide–water media 65
DPPA
A thermal study of lanthanoid trifluoromethanesulfonate complexes with diphenylphosphinamide (DPPA) 173
DSC
The perfection of a method for the determination of the temperature/vapour-pressure function of liquids by differential scanning calorimetry 167
Preparation and thermal decomposition of solid state compounds of 4-methoxybenzylidenepyruvate and trivalent lanthanides and yttrium 215
Polymorphism of phenethylammonium bromide: the effect of particle properties on the thermodynamics 245
Thermally induced isomerization and decomposition of *N*-(2-aminoethyl)-1,3-propanediamine complexes of nickel(II) in the solid state 261
Deposit formation in aero engines — investigation by pressure differential scanning calorimetry (PDSC) 305
A study of the thermal decomposition of urea, of related compounds and thiourea using DSC and TG–EGA 315
A theoretical investigation of the preconditions for obtaining the true thermodynamic transition temperature from only one DSC measurement 325
Thermal conductivity measurements of tRNA melting process 355
DTA
Structural and thermal studies of the chloro complexes of cobalt, nickel and copper with 1,6-hexanediamine 159
Thermal behaviour of some homogeneously esterified products of high $\alpha$-cellulose pulps of fast growing plant species 191
Thermal decomposition of the hydrated basic carbonates of lanthanides and yttrium in $CO_2$ atmosphere 225
Topochemical transformations of hydrated sodium triphosphate, lithium triphosphate and mixed triphosphates 235
Thermally induced isomerization and de-

composition of *N*-(2-aminoethyl)-1,3-propanediamine complexes of nickel(II) in the solid state 261
Studies on the formation of $\gamma$-$Fe_2O_3$ by thermal decomposition of ferrous malate dihydrate 269
Thermogravimetric studies on miscible blends of ethylene–methyl acrylate copolymer (EMA) and polydimethylsiloxane rubber (PDMS) 283

DTAB
Thermodynamic studies of the interaction of glucose oxidase with anionic and cationic surfactants 143
The thermal denaturation of histones ($H_2A$, $H_3$, $H_2B$) in the presence of surfacants 151

DTG
The effect of pre-heating on the evolution of the acidity of pillared clays 179
Thermal behaviour of some homogeneously esterified products of high $\alpha$-cellulose pulps of fast growing plant species 191
Thermal decomposition of the hydrated basic carbonates of lanthanides and yttrium in $CO_2$ atmosphere 225
Topochemical transformations of hydrated sodium triphosphate, lithium triphosphate and mixed triphosphates 235
Studies on the formation of $\gamma$-$Fe_2O_3$ by thermal decomposition of ferrous malate dihydrate 269
Thermogravimetric studies on miscible blends of ethylene–methyl acrylate copolymer (EMA) and polydimethylsiloxane rubber (PDMS) 283
The effect of crosslink density, curing system, filler and resin on the decomposition of hydrogenated nitrile rubber and its blends 293

EDTA
Thermal conductivity measurements of tRNA melting process 355

EGA
A study of the thermal decomposition of urea, of related compounds and thiourea using DSC and TG–EGA 315

EMA
Thermogravimetric studies on miscible blends of ethylene–methyl acrylate copolymer (EMA) and polydimethylsiloxane rubber (PDMS) 283

Energy balance
Developments in cellular microcalorimetry with particular emphasis on the valuable role of the energy (enthalpy) balance method 17

Equipment
The perfection of a method for the determination of the temperature/vapour-pressure function of liquids by differential scanning calorimetry 167

*Escherichia*
Thermal conductivity measurements of tRNA melting process 355

Fermentation
A microcalorimetric study of the inhibitory effects of ethanol on the fermentation process of D-xylose by *Pichia stipitis* 135

Flow injection analysis
On the use of mixing reactors in flow injection analysis with thermal lens calorimetric detection 53

FTIR
A study of the thermal decomposition of urea, of related compounds and thiourea using DSC and TG–EGA 315

Gamma irradiation
Structural interpretation of the ambiguous loopy effect of gamma irradiation on the phase transition thermodynamics of US-HY zeolite 73

GEFTA
The temperature calibration of scanning calorimeters. Part 2. Calibration substances 333

Glucose oxidase
Thermodynamic studies of the interaction of glucose oxidase with anionic and cationic surfactants 143

Heat capacity
Structural interpretation of the ambiguous loopy effect of gamma irradiation on the phase transition thermodynamics of US-HY zeolite 73

Heat of decomposition
A study of the thermal decomposition of urea, of related compounds and thiourea using DSC and TG–EGA 315

Heat of formation
Thermodynamic investigation of the Rh–Ge and Ir–Ge binary alloys 365

Heat of fusion
Thermodynamic properties of organic compounds. Part 4. First update of enthalpy of fusion and melting point temperature compilation 97
A study of the thermal decomposition of urea, of related compounds and thiourea using DSC and TG–EGA 315

Heat of mixing
Correlation of heats of mixing of liquid mixtures by the NRTL model 83
Heat of solution
The enthalpy of solution of sodium, potassium and caesium chlorides in propionic acid–water mixtures at 298.15 K 105
Hexanediamine
Structural and thermal studies of the chloro complexes of cobalt, nickel and copper with 1,6-hexanediamine 159
Histone
The thermal denaturation of histones ($H_2A$, $H_3$, $H_2B$) in the presence of surfacants 151
HNBR
The effect of crosslink density, curing system, filler and resin on the decomposition of hydrogenated nitrile rubber and its blends 293
Hot-stage microscopy
Polymorphism of phenethylammonium bromide: the effect of particle properties on the thermodynamics 245

Iron compound
Studies on the formation of $\gamma$-$Fe_2O_3$ by thermal decomposition of ferrous malate dihydrate 269
Iron malate
Studies on the formation of $\gamma$-$Fe_2O_3$ by thermal decomposition of ferrous malate dihydrate 269
IRS
A thermal study of lanthanoid trifluoromethanesulfonate complexes with diphenylphosphinamide (DPPA) 173
Topochemical transformations of hydrated sodium triphosphate, lithium triphosphate and mixed triphosphates 235
Isomer
Thermally induced isomerization and decomposition of *N*-(2-aminoethyl)-1,3-propanediamine complexes of nickel(II) in the solid state 261
Isoperibol
The enthalpy of solution of sodium, potassium and caesium chlorides in propionic acid–water mixtures at 298.15 K 105

Kinetics
Studies on the thermokinetics of reversible reactions 43

Lanthanon compound
A thermal study of lanthanoid trifluoromethanesulfonate complexes with diphenylphosphinamide (DPPA) 173
Preparation and thermal decomposition of solid state compounds of 4-methoxybenzylidenepyruvate and trivalent lanthanides and yttrium 215
Thermal decomposition of the hydrated basic carbonates of lanthanides and yttrium in $CO_2$ atmosphere 225
Lewis acid
The effect of pre-heating on the evolution of the acidity of pillared clays 179
Ligand
Thermodynamics of complexation of some transition metal ions by salicylaldehyde carbohydrazone pyridinium chloride and diacetyl carbohydrazone pyridinium chloride 121
Living system
On the accuracy of results from microcalorimetric measurements on cellular systems 1
Lubricant
Deposit formation in aero engines — investigation by pressure differential scanning calorimetry (PDSC) 305

Melting
Thermal conductivity measurements of tRNA melting process 355
Melting point
Thermodynamic properties of organic compounds. Part 4. First update of enthalpy of fusion and melting point temperature compilation 97
Methodology
The perfection of a method for the determination of the temperature/vapour-pressure function of liquids by differential scanning calorimetry 167
Methoxybenzylidenepyruvate
Preparation and thermal decomposition of solid state compounds of 4-methoxybenzylidenepyruvate and trivalent lanthanides and yttrium 215
Microcalorimetry
On the accuracy of results from microcalorimetric measurements on cellular systems 1
A microcalorimetric study of the inhibitory effects of ethanol on the fermentation process of D-xylose by *Pichia stipitis* 135
Mixed salt
Topochemical transformations of hydrated sodium triphosphate, lithium triphosphate and mixed triphosphates 235
Model
Studies on the thermokinetics of reversible reactions 43
Correlation of heats of mixing of liquid mixtures by the NRTL model 83

Montmorillonite
The effect of pre-heating on the evolution of the acidity of pillared clays 179
Nickel compound
Structural and thermal studies of the chloro complexes of cobalt, nickel and copper with 1,6-hexanediamine 159
Thermally induced isomerization and decomposition of *N*-(2-aminoethyl)-1,3-propanediamine complexes of nickel(II) in the solid state 261
NRTL
Correlation of heats of mixing of liquid mixtures by the NRTL model 83

Oil
Deposit formation in aero engines — investigation by pressure differential scanning calorimetry (PDSC) 305
Oxalic acid
Thermodynamic parameters of transfer and solution of oxalic acid in dimethylsulphoxide–water media 65
Oxidation
The effect of crosslink density, curing system, filler and resin on the decomposition of hydrogenated nitrile rubber and its blends 293
Deposit formation in aero engines — investigation by pressure differential scanning calorimetry (PDSC) 305

PDMS
Thermogravimetric studies on miscible blends of ethylene–methyl acrylate copolymer (EMA) and polydimethylsiloxane rubber (PDMS) 283
PDSC
Deposit formation in aero engines — investigation by pressure differential scanning calorimetry (PDSC) 305
Phase
The properties of salt-filled sodalites. Part 3. Synthesis and thermal behaviour of basic and non-basic carbonate enclathrated sodalites 205
Thermodynamic investigation of the Rh–Ge and Ir–Ge binary alloys 365
Phase transition
Structural interpretation of the ambiguous loopy effect of gamma irradiation on the phase transition thermodynamics of US-HY zeolite 73
Polymorphism of phenethylammonium bromide: the effect of particle properties on the thermodynamics 245
*Pichia*
A microcalorimetric study of the inhibitory effects of ethanol on the fermentation process of D-xylose by *Pichia stipitis* 135
Polymorphism
Polymorphism of phenethylammonium bromide: the effect of particle properties on the thermodynamics 245
Pre-heating
The effect of pre-heating on the evolution of the acidity of pillared clays 179
Pre-history
The effect of pre-heating on the evolution of the acidity of pillared clays 179
Protein
The thermal denaturation of histones ($H_2A$, $H_3$, $H_2B$) in the presence of surfacants 151
Protonation
A calorimetric study of the protonation of vitamin $D_3$ and of three other ligands and their formation of binary and ternary complexes with Cd(II) 115
Pyridine
The effect of pre-heating on the evolution of the acidity of pillared clays 179

Recommendation
The temperature calibration of scanning calorimeters. Part 2. Calibration substances 333
Resin
The effect of crosslink density, curing system, filler and resin on the decomposition of hydrogenated nitrile rubber and its blends 293
Rubber
Thermogravimetric studies on miscible blends of ethylene–methyl acrylate copolymer (EMA) and polydimethylsiloxane rubber (PDMS) 283

SDS
Thermodynamic studies of the interaction of glucose oxidase with anionic and cationic surfactants 143
Sensitivity
A microcalorimetric study of the inhibitory effects of ethanol on the fermentation process of D-xylose by *Pichia stipitis* 135
SHS
Thermodynamic studies of the interaction of glucose oxidase with anionic and cationic surfactants 143
Sodalite
The properties of salt-filled sodalites. Part 3. Synthesis and thermal behaviour of basic

and non-basic carbonate enclathrated sodalites 205
Solubility
Thermodynamic parameters of transfer and solution of oxalic acid in dimethylsulphoxide–water media 65
Spectrophotometry
Thermodynamic studies of the interaction of glucose oxidase with anionic and cationic surfactants 143
Stability
The effect of pre-heating on the evolution of the acidity of pillared clays 179
Thermal decomposition of the hydrated basic carbonates of lanthanides and yttrium in $CO_2$ atmosphere 225
Stability constant
Thermodynamics of complexation of some transition metal ions by salicylaldehyde carbohydrazone pyridinium chloride and diacetyl carbohydrazone pyridinium chloride 121
Surface conduction coefficient
Towards a theory of the surface conductance coefficient in solids. Part 1 343
Surfactant
Thermodynamic studies of the interaction of glucose oxidase with anionic and cationic surfactants 143
The thermal denaturation of histones ($H_2A$, $H_3$, $H_2B$) in the presence of surfacants 151

TA
Structural interpretation of the ambiguous loopy effect of gamma irradiation on the phase transition thermodynamics of US-HY zeolite 73
TG
Structural and thermal studies of the chloro complexes of cobalt, nickel and copper with 1,6-hexanediamine 159
A thermal study of lanthanoid trifluoromethanesulfonate complexes with diphenylphosphinamide (DPPA) 173
The effect of pre-heating on the evolution of the acidity of pillared clays 179
Thermal behaviour of some homogeneously esterified products of high $\alpha$-cellulose pulps of fast growing plant species 191
Preparation and thermal decomposition of solid state compounds of 4-methoxybenzylidenepyruvate and trivalent lanthanides and yttrium 215
Thermal decomposition of the hydrated basic carbonates of lanthanides and yttrium in $CO_2$ atmosphere 225
Topochemical transformations of hydrated sodium triphosphate, lithium triphosphate and mixed triphosphates 235
Thermally induced isomerization and decomposition of *N*-(2-aminoethyl)-1,3-propanediamine complexes of nickel(II) in the solid state 261
The effect of crosslink density, curing system, filler and resin on the decomposition of hydrogenated nitrile rubber and its blends 293
Deposit formation in aero engines — investigation by pressure differential scanning calorimetry (PDSC) 305
A study of the thermal decomposition of urea, of related compounds and thiourea using DSC and TG–EGA 315
TGA
Studies on the formation of $\gamma$-$Fe_2O_3$ by thermal decomposition of ferrous malate dihydrate 269
Thermogravimetric studies on miscible blends of ethylene–methyl acrylate copolymer (EMA) and polydimethylsiloxane rubber (PDMS) 283
The effect of crosslink density, curing system, filler and resin on the decomposition of hydrogenated nitrile rubber and its blends 293
A study of the thermal decomposition of urea, of related compounds and thiourea using DSC and TG–EGA 315
TG–DTG
Preparation and thermal decomposition of solid state compounds of 4-methoxybenzylidenepyruvate and trivalent lanthanides and yttrium 215
Thermal decomposition of the hydrated basic carbonates of lanthanides and yttrium in $CO_2$ atmosphere 225
Theory
Towards a theory of the surface conductance coefficient in solids. Part 1 343
Thermal lens calorimetry
On the use of mixing reactors in flow injection analysis with thermal lens calorimetric detection 53
Thermodynamics
Thermodynamic parameters of transfer and solution of oxalic acid in dimethylsulphoxide–water media 65
Structural interpretation of the ambiguous loopy effect of gamma irradiation on the phase transition thermodynamics of US-HY zeolite 73
A calorimetric study of the protonation of vitamin $D_3$ and of three other ligands and their formation of binary and ternary complexes with Cd(II) 115

Thermodynamics of complexation of some transition metal ions by salicylaldehyde carbohydrazone pyridinium chloride and diacetyl carbohydrazone pyridinium chloride 121
Thermodynamic studies of the interaction of glucose oxidase with anionic and cationic surfactants 143
Polymorphism of phenethylammonium bromide: the effect of particle properties on the thermodynamics 245
On the estimation of gas-phase thermodynamic properties of organic compounds 361
Thermodynamic investigation of the Rh–Ge and Ir–Ge binary alloys 365

Thermogenesis
Developments in cellular microcalorimetry with particular emphasis on the valuable role of the energy (enthalpy) balance method 17

Thiourea
A study of the thermal decomposition of urea, of related compounds and thiourea using DSC and TG–EGA 315

TLC
Topochemical transformations of hydrated sodium triphosphate, lithium triphosphate and mixed triphosphates 235

Transfer ribonucleic acid
Thermal conductivity measurements of tRNA melting process 355

Transition
Polymorphism of phenethylammonium bromide: the effect of particle properties on the thermodynamics 245

Transition metal compound
Thermodynamics of complexation of some transition metal ions by salicylaldehyde carbohydrazone pyridinium chloride and diacetyl carbohydrazone pyridinium chloride 121

Transition temperature
A theoretical investigation of the preconditions for obtaining the true thermodynamic transition temperature from only one DSC measurement 325

Triphosphate
Topochemical transformations of hydrated sodium triphosphate, lithium triphosphate and mixed triphosphates 235

tRNA
Thermal conductivity measurements of tRNA melting process 355

Urea
A study of the thermal decomposition of urea, of related compounds and thiourea using DSC and TG–EGA 315

Vapour pressure
The perfection of a method for the determination of the temperature/vapour-pressure function of liquids by differential scanning calorimetry 167

Vitamin D
A calorimetric study of the protonation of vitamin $D_3$ and of three other ligands and their formation of binary and ternary complexes with Cd(II) 115

XRD
The properties of salt-filled sodalites. Part 3. Synthesis and thermal behaviour of basic and non-basic carbonate enclathrated sodalites 205
Preparation and thermal decomposition of solid state compounds of 4-methoxybenzylidenepyruvate and trivalent lanthanides and yttrium 215
Topochemical transformations of hydrated sodium triphosphate, lithium triphosphate and mixed triphosphates 235
Studies on the formation of $\gamma$-$Fe_2O_3$ by thermal decomposition of ferrous malate dihydrate 269

Xylose
A microcalorimetric study of the inhibitory effects of ethanol on the fermentation process of D-xylose by *Pichia stipitis* 135

Yeast
A microcalorimetric study of the inhibitory effects of ethanol on the fermentation process of D-xylose by *Pichia stipitis* 135

Yttrium compound
Preparation and thermal decomposition of solid state compounds of 4-methoxybenzylidenepyruvate and trivalent lanthanides and yttrium 215
Thermal decomposition of the hydrated basic carbonates of lanthanides and yttrium in $CO_2$ atmosphere 225

Zeolite
Structural interpretation of the ambiguous loopy effect of gamma irradiation on the phase transition thermodynamics of US-HY zeolite 73